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CERCOSPORA THEAE IN FLORIDA

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The first authenticated report of Cercospora theae (Cav.) Breda de Haan in the United States was made by Plakidas[1]/in 1959. The fungus was found on leaves of Camellia sasanqua Thunb. (Texas Star and Pink Snow) and on Thea sinensis L. (= Camellia thea L.). Accession files of the Plant Pathology Section, however, suggest the possible occurrence of this pathogen in Florida as early as 1955. Three reports of lesions on leaves of Camellia. japonica L., 4 on C. sasanqua. and 1 on T. sinensis revealed the causal fungus to be a Cercospora sp. A single report each on C. japonica and T. sinensis indicate that C. theae was the suspected pathogen.

In March 1963, leaf specimens of Thea sinensis L. were received from Cocoa, Florida, with a Cercospora sp. fruiting abundantly on both surfaces of the leaf lesions. Except for minor morphological differences, the organism appeared to resemble C. theae. Portions of this collection were sent to Dr. Charles Chupp of Cornell University who confirmed the first report of this fungus (C. theae) in Florida.

SYMPTOMS.—Leaf lesions (Fig. 1A and 1B) on T. sinensis are circular to mostly irregular; centers depressed to slightly raised, brown to light gray in color; margins raised, indistinctly zonate, and measure 5-20 mm. Young lesions on C. sasanqua leaves are essentially the same as those on leaves of T. sinensis. Older lesions are light gray in color and raised, with numerous black stromata embedded subcuticularly in the lesions. It is from these stromata that conidiophores and conidia of the fungus arise. Lesions on leaves of C. sasanqua (Fig. 2) are somewhat larger, on the average, than those of T. sinensis.

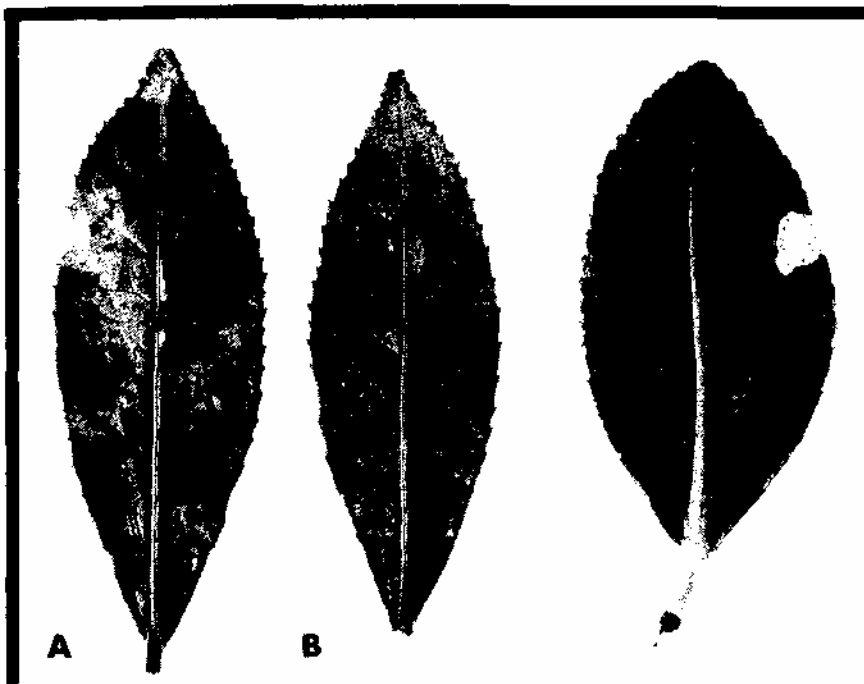

Fig. 1.

Fig. 2.

Fig. 1.--Lesions caused by Cercospora theae (Cav.) Breda de Haan on leaves of Thea sinensis L.
A) Upper leaf surface.
B) Lower leaf surface.

Fig. 2.--A lesion caused by Cercospora Thea (Cav.) Breda de Haan on leaves of Camellia sasanqua Thunb.

CONTROL.—As indicated by Plakidas, crowding, partial shade, and high humidity appear to favor development of this fungus and should be avoided if possible. A fixed copper is recommended at the rate of 2 lbs. per 100 gals. of water as a protective measure.

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[1]/Plakidas, A. G.1959.Cercospora theae on Camellia sasanqua and Thea sinensis. Plant Disease Rept. 43(6): 668-669.